DOCUMENT RESUME

ED 375 721 HE 027 805

AUTHOR Villalpando, Octavio
TITLE Comparing the Effects of Multiculturalism and Diversity on Minority and White Students' Satisfaction with College. ASHE Annual Meeting Paper.
PUB DATE 9 Nov 94
NOTE 30p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (19th, Tucson, AZ, November 10-13, 1994).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Asian Americans; Black Students; College Students; *Cultural Awareness; Cultural Differences; *Cultural Pluralism; Educational Environment; Educational Methods; Ethnic Groups; Higher Education; Mexican Americans; *Minority Groups; Multicultural Education; *Participant Satisfaction; *Student Attitudes; Undergraduate Students; White Students
IDENTIFIERS African Americans; *ASHE Annual Meeting; Cooperative Institutional Research Program; *Diversity (Student); Hispanic American Students

ABSTRACT

This study examined whether and how an institution of higher education's emphasis on diversity affects students of color differently from white students. Data, which were drawn from the Cooperative Institutional Research Program, involved 15,600 students who were freshmen in 1985 and were followed up in 1989 and who identified themselves as belonging to one of the following four groups: African American, Mexican American/Chicano, Asian American, or White. Students who reported high levels of satisfaction with college were those who attended racial/cultural awareness workshops and socialized with someone of a different race/ethnic group. Students from all four groups benefited equally from participating in these workshops. Every group of students was positively affected by faculty's use of instructional methodology that included content on ethnic and racial issues, as well as research or writing addressing women, ethnicity, or race. A college's or university's commitment to increasing their numbers of women and minority faculty and students and commitment to creating a diverse multicultural environment and an appreciation for multiculturalism also had a strong effect on students' satisfaction with college. Environmental measures that demonstrated effects on student satisfaction are also analyzed. (Contains 25 references.) (JDD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 375 721

Comparing the Effects of Multiculturalism and Diversity on Minority and White Students' Satisfaction with College

A Paper Presented at the Annual Meeting of the
Association for the Study of Higher Education

Tucson, Arizona
November 9, 1994

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

ASHE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

HE027 805

Octavio Villalpando

Higher Education Research Institute
Graduate School of Education
University of California, Los Angeles
Los Angeles, CA 90024-1521
(310) 825-1925

BEST COPY AVAILABLE

ASHE

ASSOCIATION
FOR THE
STUDY OF
HIGHER EDUCATION

Texas A&M University
Department of Educational
Administration
College Station, TX 77843
(409) 845-0393

This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Doubletree Hotel, Tucson, Arizona, November 10-13, 1994. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

Background

Over the last two decades, there have been calls for colleges and universities to become more representative of the diverse demographic and cultural make-up of the U.S population (Marcus, 1994; Orfield, 1993; Orlans, 1992; Zemsky, 1989). Institutions have responded by attempting to increase the numbers of women and historically underrepresented ethnic/racial minorities among their student populations, faculty, and staff, and by developing a curriculum that is more inclusive and representative of the perspectives of members of these groups (Hunt, Bell, Wei, & Ingle, 1992; LaBare & Lang, 1992; Tierney, 1989). By fostering an environment that, at a minimum, includes and reflects the contributions and perspectives of a diverse population--or promoting and emphasizing "diversity"--the expectation is that the entire university community will benefit through the enhanced educational experiences of its students.

However, even though there is a growing number of studies finding generally positive effects on the educational experiences of students from campuses that emphasize a multicultural environment (Milem, 1992; Pascarella & Terenzini, 1991; Smith, 1990), some continue to argue that these institutions may in fact be polarizing their students along ethnic/racial lines (D'Souza, 1991; Schlesinger, 1992). The media has sensationalized this debate at the national level by focusing on primarily anecdotal incidents of ethnic/racial problems between college students and by framing the issue of diversity within the ongoing "political correctness" controversy.

A recent national longitudinal study, however, provides further support for the positive effects of a multicultural environment by suggesting that emphasizing diversity issues on college campuses has a positive effect on students' educational experiences (Astin, 1993a). By assessing the effects of students' direct involvement with "diversity" activities, like taking women's or ethnic studies courses and socializing with someone from another racial/ethnic group, Astin found that the institutional and individual environmental experiences of students "were associated with greater self-reported gains in (their) cognitive and affective development .. and.. with increased satisfaction with most areas of the college experience..." (1993a, p. 431). He also discovered that students who attended a university that emphasizes diversity through formal institutional policies

or through its faculty's research and teaching reported greater gains in their cognitive and affective development (Astin, 1993b). Thus, his research provides further evidence that students who attend campuses that emphasize diversity and multiculturalism appear to benefit from their experiences.

Significance of Problem

While research by conducted by Astin and others identifies the beneficial value of diversity and multicultural experiences for *all* students, very little is known about whether these experiences have the same effects on differentiated groups of students--like students from different ethnic/racial minority groups. Substantial evidence exists to suggest that students of color experience college differently from white students (Allen, 1986; Astin, 1982; Hurtado, 1990; Pascarella & Terenzini, 1991), but it is not known whether they are affected differently by attending institutions that actively emphasize diversity and multiculturalism. The institutional and environmental experiences that Astin found to have positive effects on selected outcomes for undifferentiated groups of students might perhaps yield different effects for students of color. How, for example, might an African American, Mexican American/Chicano, or Asian American student be affected by attending an institution that has a strong emphasis on promoting a diverse and multicultural environment? Would s/he benefit from this environment as much as white students, or might the environment promote divisiveness along ethnic/racial identification by emphasizing cultural differences? In an effort to help clarify some of these issues and address the current controversy regarding the effect of multiculturalism on the *entire* campus student community, this study examined whether and how a diversity environment affects students of color differently from white students.

Objectives and Conceptual Framework

Astin (1993a) assessed an institution's emphasis on diversity with variables derived from constructs addressing the teaching and research diversity orientation of faculty, their perception of their colleagues' student orientation, students' direct involvement with diversity experiences, the ethnic/racial composition of the student body, and several institutional characteristics such as

curricular course offerings addressing multiculturalism. Using these same diversity emphasis measures, this study compared the effects of an institution's diversity emphasis on students' reported overall satisfaction with college. Specifically, the study examined and compared the effects of participating in multicultural/diversity experiences on each of the following groups' overall satisfaction with college: African American, Mexican American/ Chicano, Asian American, and White students.

Given Astin's recent findings indicating that students who attend a university that emphasizes diversity report greater cognitive and affective developmental gains, and increased satisfaction with most areas of the college experience, one might expect similar positive effects for differentiated groups of students. However, when an institution emphasizes racial and cultural diversity, it is often required to focus attention on the experiences of students of color, whose "difference" will then become a part of the legitimate learning process and public debate. While this process seems to lead to positive outcomes for undifferentiated groups of students, students of color might become alienated from the social and academic systems of the university environments as the legitimacy of their experiences is debated within the context of multiculturalism in the often hostile classroom environment. Thus, this study initially expected to find some indication that, in comparison to White students, students of color would not report as high a level of overall satisfaction with college when there was a strong diversity emphasis in their institution.

Method

Data Source and Sample

The data in this study were drawn from the UCLA Higher Education Research Institute's Cooperative Institutional Research Program (CIRP), a national longitudinal survey of college students that includes information from approximately 200,000 first-time freshmen at 365 four-year colleges and universities. These students were initially surveyed in 1985 and followed up again in 1989. The CIRP database contains information collected directly from institutions, as well as information on enrollments, earned degrees, faculty, and the curriculum. The sample

selected for this study was limited to 15,600 students who were followed up in 1989 and self-identified as: African American (n=749), Asian American (n=518); Mexican American/Chicano (n=220), and White (n=14,086).

Study Design

The study used the Input-Environment-Outcome (I-E-O) methodological framework for assessing student change (Astin, 1991). I-E-O attempts to assess the impact of various pre-college and college characteristics on specific student outcomes. Implementation of this model requires that the effects of "input" characteristics, such as students' gender be controlled so that one can measure the effect of the college "environment" on selected cognitive or affective "outcomes." Inputs include students' characteristics at the point of college entry. The college Environment includes structural characteristics of the institution, such as peer and faculty environments and the students experiences during college. Outcomes include measurable characteristics of the students after having been exposed to the college environment.

The I-E-O framework was implemented using blocked stepwise regression analysis in order to determine which input or college environmental characteristics may contribute to students' overall satisfaction with their college experience. Any variable entering a stepwise regression equation was used in a final set of forced regressions designed to detect interaction effects. By having the same set of variables forced for each group, the study ensured that the same variables would be included in comparing their effect on each ethnic/racial group, even if some of the variables did not contribute at a level of statistical significance. These procedures will be addressed in greater detail in the Analyses section of this study.

Variables

Again, the study operationalized an institution's emphasis on diversity with variables derived from constructs addressing: 1) the teaching and research diversity orientation of faculty, 2) faculty's perception of their colleagues' student orientation, 3) students' direct involvement with diversity experiences, 4) several institutional characteristics such as curricular course offerings addressing multiculturalism, and 5) the ethnic composition of the student body. These variables

are supported by previous research as having an effect on students' cognitive and affective development (Astin, 1993a; Pascarella & Terenzini, 1991).

The outcome, or dependent variable, is students' reported level of *satisfaction with the overall college experience*. The responses are coded on a four point scale, from "very satisfied" to "dissatisfied." There is no specific pretest for this outcome.

There were initially a total of 81 variables used in this study during the first exploratory phase. Each variable is described in the appendix in detail. The following variables affected the study's outcome by entering into one or more regression equations.

The first set of independent variables included the students' characteristics identified at the point of entry:

Input (Control) Variables:

High School GPA
SAT Composite Scores
Sex-Female
Highest Degree Planned

The second set of independent variables included the "Bridge" variables that link the transition between inputs and the college environment. For example, the students' "living arrangement" is identified as a Bridge variable since it occurs at the point of college entry and also selects the type of environment to which the student will be exposed during her first year in college:

Bridge Variables:

Aid Source: Parents or Family
Aid Source: Full-time Job
Aid Source: Part-time Job
Aid Source: Other Private Grant
Freshman Major: Health Profession
Freshman Major: Undecided
Planned to Live at Home
Plan to Live on Campus
Planned to Live in Private Room

The next set of independent variables included measures of the college environment. These are the variables of primary interest in this study since they are the measures most closely related to issues of diversity. They include measures of the institution's characteristics, such as size, characteristics of the faculty, and student peers. The following list includes the operational definition of these variables:

Environmental Variables

Institutional Diversity Emphasis--aggregates measures of faculty's perception that the institution is committed to increasing the number of women, minority faculty and students, creating a diverse multicultural environment, and an appreciation for multiculturalism.

Faculty Diversity Orientation--Refers to faculty's use of instructional methodology that includes content on ethnic and racial issues, and research or writing addressing women, ethnicity, or race.

Faculty's Perception of their Colleagues' Student Orientation

Curricular Measure--Required Course on Minorities/Third World

Peer Environment--Racial composition of the student body; Selectivity and Academic Ability; and Peer "Personality" Factor mean scores such as students' intellectual self-esteem, permissiveness, social activism, artistic inclination, outside work, scientific orientation, and feminism.

Institutional Characteristics--Size, Control, Type, and Student Body Ethnic/Racial Composition.

The last set of variables measure students' direct involvement and experiences with their environment. This set is distinguished from the previous set of Environmental Variables because, even though they occur during college, they are also dependent on the type of institutional environment selected by the student:

Intermediate Outcome: Individual Diversity Involvement Measures:

Enrolled in Women's Studies Course

Enrolled in Ethnic Studies Course.

Participated in Campus Protests/Demonstrations.

Attended Racial/Cultural Awareness Workshops.

Participated in Volunteer Activities.

Analyses

As a first step in comparing the effects of emphasizing diversity issues on African American, Mexican American/Chicano, Asian American and White students' overall satisfaction with college, a series of crosstabulations and simple correlations were conducted. Students' Input characteristics were correlated with Environmental measures and with their overall satisfaction with college in order to determine any preliminary associations between variables.

The next step in the analyses utilized blocked stepwise regression analysis. Blocked stepwise regression analysis was conducted separately for each ethnic/racial group to explore which student and institutional characteristics, and environmental experiences contribute to their overall level of satisfaction with college. Again, the blocks for this regression analysis followed Astin's I-E-O methodological framework, which controls for students' precollege characteristics in order to examine the effect of specific college environmental characteristics and experiences on selected student outcomes. Accordingly, independent variables were entered into the regression in blocks following the sequence in which they might be expected to affect the outcome variable. The first block included the Input (control) variables listed previously and in the appendix. The second block included the Bridge variables. The third block included all variables comprising the Environment (institutional characteristics, faculty environment, curricular measure and peer environment). The fourth and final block included the Intermediate Outcome variables comprised of students' individual involvement measures. Once the regression analyses were conducted for each of the four groups, the next task was to compare the results across these groups. Since different sets of variables entered each equation, these original regression analyses were not

appropriate for comparing the effects of diversity variables across the four groups. In order to compare the effects of diversity measures across regressions, it was important to create a standard regression setup for each group. To accomplish this, any variable entering either of the four regression equations was used in a final set of forced regressions for each ethnic group. This procedure allowed for a comparison of effects across the four groups.

Results

Table 1 lists the variables that entered into the equation for at least one group in the final regression analyses. The table includes simple correlations (Simple r) and standardized regression coefficients (Betas) at selected steps for each variable. The Beta coefficients were recorded from each group's forced regressions.

The principal purpose of Table 1 is to detect any interaction effects by identifying what variables affect particular groups in comparison to the other groups. Thus, this procedure differs from a stepwise regression where only significant variables enter the equation, and the comparison is limited to how each variable contributes to the outcome.

To some extent, the p-value (the level of significance) indicated in the table may not be as important as it would in other tables reflecting a different regression procedure. As one would expect, the different sample sizes will have an affect on the p-value of many of the variables. On one extreme are White students (n=14,086) who are consistently significantly affected by many variables, and on the other extreme are Chicanos (with a sample size of only 220 students) who rarely seem to be significantly affected by any variables. Note, however, that in many instances the non-significant coefficients for Chicanos are even larger than the comparable coefficients for Whites, even though the coefficients for Whites may be significant.

Table 1

Predicting the Effects of Emphasizing Diversity Issues on Minority and White Students' Overall Satisfaction with College.
(Minority Students: African Amer [AFR] N = 749, Asian Amer [ASN] N = 518, Chicano [CHI] N = 220; White Students [WHT] N = 14,086).

		Simple r				Beta After Controlling For: Input				Bridge				Environment				Intermediate Outcome			
Step	Variables	AFR	ASN	CHI	WHT	AFR	ASN	CHI	WHT	AFR	ASN	CHI	WHT	AFR	ASN	CHI	WHT	AFR	ASN	CHI	WHT
Input																					
1	High School GPA	.09	.11	.08	.11	.07*	.09*	.09	.07**	.07	.09*	.07	.09**	.05	.11*	.01	.09**	.03	.13*	.01	.09**
2	SAT Composite	.06	.03	.002	.07	.03	-.02	-.06	.04**	.04	-.03	-.11	.02	.04	-.06	-.07	.01	.04	-.06	-.06	.004
3	Sex: Female	.01	.07	.01	.04	.01	.07	.04	.04**	.03	.07	.06	.04**	-.03	.01	.08	.02*	-.04	.01	.07	.02
4	Highst Deg Aspired: MA	.03	.10	.14	.06	.01	.09*	.15*	.04**	-.01	.09*	.13	.03**	-.05	.05	.14*	.02*	-.07	.05	.13	.01
Bridge																					
5	Plan to Live on Campus	.19	.10	.20	.15	.18**	.10*	.19**	.13**	.10	.09	.25	.06**	.08	-.01	.22	.05*	.08	-.01	.20	.04*
6	Plan to Live at Home	-.18	-.08	-.17	-.15	-.18**	-.08	-.14	-.14**	-.10	-.002	.05	-.08**	-.06	-.04	.13	-.05	-.05	-.03	.10	-.04*
7	Fin Source: Part-time Job	-.10	-.02	.06	-.05	-.11*	-.03*	.07	-.05	-.10*	-.01	.06	-.03*	-.09*	-.03	.03	-.02*	-.09*	-.03	.03	-.03*
8	Fin Source: Full-time Job	-.06	-.12	.01	-.01	-.01	-.10	.01	-.01	-.03	-.09*	.01	.003	-.03	-.13**	.02	.002	-.03	-.12*	-.01	.002
9	Fin Source: Oth Priv Grt	-.01	-.06	.03	.05	-.02	-.09	-.02	.03**	-.03	-.09*	-.02	.02*	-.01	-.09*	-.07	.02*	-.01	-.10*	-.07	.02*
10	Fin Source: Parents/Fam	.02	.09	.06	.07	.01	.09	.06	.01**	-.01	.05	.03	.03**	-.04	.05	-.05	.02*	-.04	.03	-.06	.03**
11	Major: Undecided	.03	-.11	.04	.02	.03	-.11*	.04	.01**	.02	-.12**	.07	.01	.01	-.11*	.04	.003	.01	-.12*	.03	-.003
12	Major: Health Profession	.04	.10	.05	-.01	.03	-.02	.05	-.02**	.03	-.04	.04	-.02**	.04	-.03	.07	-.02	.05	-.04	.07	-.02*
Environment																					
13	Coeducatonal College	-.18	-.16	-.06	-.05	-.19**	-.14**	-.08	-.05**	-.17	-.11*	-.02	-.04**	.07	-.09	-.03	-.01	.07	-.10	-.04	-.01
14	Public University	-.09	-.19	-.11	-.06	-.09**	-.19**	-.09	-.05**	-.07	-.19**	-.07	-.04**	-.02	-.21*	-.18	.01	-.02	-.21*	-.17	.02
15	Public Four-Year Univ	.02	.01	-.07	-.03	.03	.04	-.06	-.01	.03	.04	-.07	-.01	.13**	-.03	-.10	.01	.13**	-.04	-.08	.01
Faculty Environment																					
16	Fac Per: Inst Div Emphas	.23	.10	.02	.09	.14**	.11*	.02	.09**	.13**	.11*	-.02	.07**	.03	.15*	-.18	.07**	.02	.13	-.18	.06**
17	Fac Diversity Orient	.14	.12	.17	.10	.25**	.09	.16*	.08**	.22**	.09	.12	.07**	.17*	.05	.31**	-.01	.16*	.03	.29**	.02
18	Fac Per: Student Orient	.11	.17	.02	.10	.11**	.17**	.01	.10**	.09*	.17**	-.02	.10**	-.10	-.11	-.33	.06**	-.09	-.10	-.31	.06**
Peer Environment																					
19	Percent of Asian UGFTE	-.05	-.14	.08	.03	-.08*	-.16**	.06	.001	-.04	-.15**	.05	.002	-.02	-.11	.04	.03*	-.003	-.09	.05	.02*
20	Institutional Selectivity	-.02	.06	.10	.10	-.07	.04	.12	.06**	-.05	.02	.05	.02*	.19	-.15	-.23	-.05*	.15	-.22	-.28	-.05**
21	PM: Intellectual Self-Est	.14	.04	.16	.09	.13**	.003	.22**	.06**	.13**	.01	.21*	.02*	-.02	.18	.60**	.06**	-.02	.20*	.61**	.06**
22	PM: Permissiveness	.10	.02	.04	.03	.09*	.02	.04	.02	.07*	.001	.02	.002	.05	-.02	-.13	.02	.06	-.03	-.12	.01
23	PM: Social Activism	.23	.07	.02	.12	.24**	.06	.03	.10**	.21**	.07	-.003	.09**	.30*	-.09	.23	.01	.27*	-.10	.23	-.01
24	PM: Materialism/Status	.10	-.12	-.08	-.11	.13**	-.11*	-.08	-.09**	.11**	-.10*	-.01	-.07**	.02	-.06	-.07	-.05**	-.01	-.06	-.07	-.05**
25	PM: Outside Work	-.10	-.02	-.13	-.10	-.09*	-.01	-.13	-.08**	-.03	.03	-.12	-.05**	.003	.05	-.12	-.06**	-.01	.04	-.11	-.06**
26	PM: Scientific Orient	.15	-.09	-.18	-.03	.15**	-.11*	-.23**	-.08**	.11**	-.10*	-.23**	-.06**	.02	-.09	-.28**	-.08**	.02	-.07	-.27*	-.07**
Intermediate Outcome																					
Individual Involvement Measure																					
27	Particip Camp Prot/Dem	.19	.12	.13	.06	.19**	.13**	.11	.05**	.17**	.12**	.07	.04**	.12**	.12*	.004	.02*	.10**	.10*	-.02	-.01
28	Attnd Racial/Cult Aw Wk	.14	.11	.20	.14	.13**	.09*	.17*	.13**	.16**	.10*	.13	.11**	.09**	.05	.07	.09**	.06	.04	.06	.07**
29	Soc W/one of Diff Ethnic	-.09	.16	.13	.12	-.10**	.15**	.12	.11**	-.09*	.14**	.09	.10**	-.02	.09*	.04	.09**	-.03	.09	.03	.08**
30	Wkly Hrs of Volunt Work	.09	-.01	.10	.09	.09*	.03	.07	.08**	.08*	-.03	.05	.08**	.09*	-.02	.04	.07**	.06	-.04	.03	.05**

* $p < .05$. ** $p < .01$.

BEST COPY AVAILABLE

Interpreting Table 1

Once again, the principal purpose of Table 1 is to identify the variables that affect particular groups in comparison to the other groups. The table cannot be interpreted by only discussing significant coefficients since it differs from a stepwise regression where only significant variables enter the equation and the comparison is limited to how each variable contributes to the outcome. Consider, for instance, the difficulty in interpreting the bizarre patterns of effects within the environmental block. After controlling for the environmental variables, the coefficients on the environment demonstrate strange patterns and sizes because this procedure required that some very highly correlated variables be forced in the same regression equation in order to make comparisons across all groups. The result is that one coefficient may be highly positive and the other highly negative to compensate for it, so the coefficients are really uninterpretable. In fact the entire last column of Table 1, Intermediate Outcomes, is entirely uninterpretable since all intermediate outcome variables in that column are highly correlated with each other. The most effective way to interpret the table is by interpreting the coefficients after controlling for the Input and Bridge, but before entering any of the Environmental variables. They are all competing on an equal basis at this point. Accordingly, the interpretation and analysis of Table 1 will follow this format.

The table presents a comprehensive view of all of the variables used in this study that entered a preliminary stepwise regression for at least one group and were subsequently forced for every group. For the purposes of this study, the major findings can be summarized by focusing on the effects of emphasizing diversity issues on students' satisfaction with college. The next section addresses these effects.

Findings of Major Importance

Given the focus of this study, the most relevant results are the variables measuring the environmental effects of a diversity emphasis on students' overall college satisfaction.

The most relevant measures of institutional diversity emphasis are the two variables summarized in Table 2. *Faculty's Perception of their Institution's Diversity Emphasis* refers to

the faculty's perception that the institution is committed to increasing the number of women, minority faculty and students, creating a diverse multicultural environment, and an appreciation for multiculturalism; and *Faculty Diversity Orientation* refers to faculty's use of instructional methodology that includes content on ethnic and racial issues, and research or writing addressing women, ethnicity, or race.

Table 2
Summary of the Effects of Diversity Environmental Measures on Minority and White Students' Overall Satisfaction with College

	Beta After Controlling for Input and Bridge Variables			
Variable	AFR	ASN	CHI	WHT
Faculty's Perception of Institutional Diversity Emphasis	.13**	.11*	-.02	.07**
Faculty's Diversity Orientation	.22**	.09	.12	.07**

(African Amer-AFR; Asian Amer-ASN; Chicano-CHI; White Students-WHT)
* p<.05, **p<.01

With only one exception, the coefficients in Table 2 show very similar effects for all four groups. Even though neither of the effects for Chicanos are significant and one of the effects for Asians is not significant either, seven of the eight coefficients are positive and similar in size--except for the .22 for African Americans which appears to have a stronger positive effect of having the faculty oriented towards diversity for Black students. In general, there is strong evidence of the effects of these measures. The one exception being *Institutional Diversity Emphasis* which does not have an effect for Chicanos. This measure suggests there is an interaction with a race/ethnic group because the coefficient for Chicanos is both negative and insignificant. However, this could possibly be a random fluctuation stemming from the small sample size. Otherwise, these diversity variables appear to have generally similar effects for all groups.

The other relevant measures of diversity emphasis in this study are the variables summarized in Table 3 measuring individual diversity involvement: *Attended a Racial/Cultural Awareness Workshops* and *Socialized with Someone of a Different Race/Ethnic Group.*

Table 3
Summary of the Effects of Individual Diversity Involvement Measures on Minority and White Students' Overall Satisfaction with College

	Beta After Controlling for Input, Bridge, and Environmental Variables			
Variable	AFR	ASN	CHI	WHT
Attended a Racial/Cultural Awareness Workshops	.09**	.05	.07	.09**
Socialized with Someone of a Different Race/Ethnic Group	-.02	.09*	.04	.09**

(African Amer-AFR; Asian Amer-ASN; Chicano-CHI-; White Students-WHT)
* p<.05, **p<.01

These variables are being interpreted after controlling for Input, Bridge, and Environmental variables. These diversity involvement measures appear to have an effect similar to the faculty environmental measures. With one exception, all eight coefficients are positive, and four of the eight are significantly positive.

When it comes to a*ttending a racial/cultural awareness workshop,* there do not appear to be any differences between the groups. Every group is positively affected, as reflected by the direction of their coefficients, which are also all similar in size. In fact, the coefficients for African American and White students are significantly different from zero, suggesting that attending a racial/cultural awareness workshop might have an especially important effect on these groups of students.

The effect of *socializing with someone of a different race/ethnic group* appears to be positive for Chicano students and significantly positive for Asian American and White students. The effect of this variable, however, is not positive for African American students. Though not significantly negative, it is still negative and suggests another interaction effect with race/ethnicity.

Thus, there appears to be something different happening when African American students socialize with someone of a different race/ethnic group than when the other groups socialize with different ethnic/racial students.

Other Interesting Effects Not Directly Related to Diversity

Table 1 highlights other interesting patterns that may not be directly related to issues of diversity but, nevertheless, have powerful suggestive evidence of how an institution's environment affects students' college experiences.

For example, Table 4 summarizes the effect of students' living arrangements on their overall satisfaction with college:

Table 4
Summary of the Effects of Living Arrangements on Minority and White Students' Overall Satisfaction with College

Variable	Beta After Controlling for Input Variables AFR	ASN	CHI	WHT
Plan to Live on Campus	.18**	.10*	.19**	.13**
Plan to Live at Home	-.18**	-.08	-.14	-.14**

(African Amer [AFR]; Asian Amer [ASN]; Chicano [CHI]; White Students [WHT])
* p<.05, **p<.01

After controlling for Input variables, Table 4 strongly suggests that all four groups are affected by their residential status in college. Living on campus appears to have a significantly strong positive effect on every student group. Conversely, living at home has a consistently negative effect on each student group, particularly African American and White students. The table clearly suggests that, regardless of racial/ethnic identity, students' overall satisfaction with college appears to be positively affected by living on campus instead of living at home.

Other interesting patterns in this study that are not directly related to diversity issues but appear to have an effect on students' satisfaction with college, are the individual involvement measures highlighted in Table 5.

Table 5
Summary of the Effects of Selected Individual Involvement Measures on Minority and White Students' Overall Satisfaction with College

	Beta After Controlling for Input, Bridge, and Environmental Variables			
Variable	AFR	ASN	CHI	WHT
Participated in Campus Protests/Demonstrations	.12**	.12*	.004	.02*
Performed Weekly Hours of Volunteer Work	.09*	-.02	.04	.07**

(African Amer [AFR]; Asian Amer [ASN]; Chicano [CHI]; White Students [WHT])
* p<.05, **p<.01

After controlling for Input, Bridge, and Environmental variables, Table 5 suggests that these two individual involvement activities have an affect on students' overall satisfaction with college. *Participating in campus protests/demonstrations* appears to have a significantly positive effect on all groups, except for Chicanos where the effect is still positive but not significant. This pattern would appear to indicate that students who engage in campus protests may be more satisfied upon graduation with college.

Similarly, most groups appeared to be positively affected by performing voluntary service every week. While African American, Chicano, and White students were positively affect by engaging in voluntary service (especially significant for African American and White students), Asian American students did not appear to benefit from this activity. In fact, their overall level of satisfaction with college appeared to be negatively affected by performing voluntary service during the week.

Summary and Implications

This study had initially expected to find that not all students who attended a campus with a strong emphasis on multiculturalism and diversity would report a high level of satisfaction with college. The findings reported by Astin (1993a) indicating that students who attend a university that emphasizes diversity report an increased satisfaction with most areas of the college experience were not expected to apply to disaggregate groups of students. Based partly on the notion that when an institution emphasizes diversity and multiculturalism it also promotes divisiveness and segregation along cultural, ethnic, and racial identity, this study hypothesized that African American, Asian American, and Chicano students would not report as high a level of college satisfaction as white students. Their lower levels of satisfaction might perhaps have stemmed from a sense of alienation from the university environment resulting from the public debate surrounding the legitimacy of studying their sociocultural experiences and history. The findings in this study, however, suggest otherwise.

There were many interesting environmental effects detected in this study that were directly (and indirectly) related to diversity. The most relevant findings of the effects of a diversity emphasis on college satisfaction were the measures of how students are affected by an institution and faculty that promote multiculturalism and diversity, and by their involvement in "diversity" activities. Indeed, these measures provided the strongest insights in this study.

If we begin by asking what students who reported high levels of satisfaction with college did as undergraduates on these campuses, the logical place to start would be by discussing their participation in multicultural/diversity activities.

Individual Diversity Involvement Measures

Attending a racial/cultural awareness workshop and *socializing with someone of a different race/ethnic group* were the two principal diversity involvement measures found to have an effect on overall satisfaction with college. Every student group, especially African Americans and Whites, reported a higher level of college satisfaction after attending a cultural awareness workshop. The effect of this measure was similar and consistent for every group, suggesting that

all students evidently benefited equally form participating in these kinds of workshops. The apparent implication for institutions would seem to be to both provide the opportunities for students to participate in these workshops as well as encourage their involvement.

This particular finding in part rebuffs the study's original hypothesis that involvement in diversity activities would lead to greater dissatisfaction among students by promoting ethnic/racial division. In fact, it would seem that the effect may have been exactly the opposite. Every group of students in this study benefited from attending a cultural awareness workshop.

The other diversity measure, *socializing with someone of a different race/ethnic group*, had a positive effect on most group's level of satisfaction with college. This effect was especially significant for on Asian American and White students. African American students were the only group whose reported overall level of satisfaction with college was negatively affected after socializing with someone of a different race/ethnic group. While the effect of this environmental variable on African American students was neither significant or relatively large (-.02), it nevertheless demonstrated the only negative effect on a student group. Given the relatively minimal size of the effect, and the counterintuitive notion that a racial minority group would be negatively affected after socially interacting with someone of another group, this analysis deserves replication. However, if this finding is reliable, one has to wonder about the qualitative nature of the social interaction between African American students and other student groups. What can be happening during this exchange that would lead African American students to be more dissatisfied with their overall college experience?

Faculty Diversity Orientation

This construct measured faculty's use of instructional methodology that includes content on ethnic and racial issues, and research or writing addressing women, ethnicity, or race. Without exception, every group of students in this study was positively affected by this measure, though it had an especially strong effect on the overall level of college satisfaction for African American and White students. This suggests that while the diversity orientation of college faculty might have a

positive effect on all students, it appears to have a greater impact on the college experiences of African American and White students.

This particular finding has several implications. First, based on the benefits demonstrated in this study for all students who are taught by faculty who write, conduct research, use instructional pedagogy, and course content on women and racial issues, one important implication would be for academic departments to not only support, but encourage this endeavor among their faculty. A large part of the research addressing issues pertinent to women, race, and ethnicity appears to derive from the humanities, education, and specific social and behavioral science disciplines and, consequently, these are the fields where most of this instruction occurs (Carter & Wilson, 1993; Finkelstein, 1984; Garza 1993; Johnsrud, 1993; UCLA Higher Education Research Institute, 1990). Campuses interested in increasing this type of teaching orientation might consider providing greater resources to these academic departments in order to supplement support for their faculty.

A second closely tied implication of this particular finding supports the need to increase the representation of faculty of color. Indeed, Garza (1993) argues that the majority of faculty of color in higher education are housed in departments where precisely issues of gender, race, and ethnicity (as well as other socially-relevant issues) are taught. Even though he argues that faculty of color are "over-represented" in these fields of relatively low status, and proposes the "de-tracking" of these disciplines, the doctoral production pipeline continues to include graduate students of color who maintain an interest in pursuing research and teaching in these fields (National Research Council, 1990, 1991, 1992). Thus, in order to improve the pool of academic scholars who historically demonstrate an interest in teaching and research with a "diversity orientation," institutions might consider enhancing their support of students of color in doctoral training programs who are preparing for careers in these fields.

This particular finding provides strong evidence of the net benefit to students of having university faculty who engage in teaching and research activities that address diversity issues.

Institutions interested in enhancing the educational experiences of its undergraduates, particularly their overall satisfaction with college, might note the importance of this finding.

Institutional Diversity Emphasis

Recalling this study's operational definition of an institution with a strong diversity emphasis as a college or university *that is committed to increasing their numbers of women, minority faculty and students, creating a diverse multicultural environment and an appreciation for multiculturalism*, the results of this study suggest that this measure has one of the relatively stronger effects on students' satisfaction with college. With one questionable exception, every student group in this study reported a high level of college satisfaction after attending institutions with a strong diversity emphasis. Chicano students were the only group that demonstrated a negative effect after attending institutions with a strong emphasis on diversity. As noted earlier, this might simply be a random fluctuation stemming from their relatively small sample size (n=220). It might also be a reflection of other structural factors in the university environment that are causing them to feel culturally alienated, resulting in a lower level of satisfaction with some areas of the college experience (Aguirre & Martinez, 1993). Otherwise, this study provides strong suggestive evidence that institutional diversity emphasis has a positive effect on most students' overall level of satisfaction with college.

What are some of the implications of this particular finding? Assuming that we accept that most students who attend campuses that have a high multicultural and diversity emphasis will tend to graduate with higher levels of satisfaction with college, the first and most obvious implication would be to try to transform our universities into multicultural campuses in order to enhance students' satisfaction with college. If this appears like an overly simplistic and naive conclusion to draw given the seemingly overwhelming task, then consider the following.

Based on Astin's (1993a) and this study's definitions of what constitutes a campus with a strong diversity emphasis, the majority of higher education institutions in this country have the relative autonomy to adopt most (if not all) of the characteristics that would transform them into universities with a strong diversity emphasis (Astin, 1991, 1993b). Take, for example, the part of

the definition suggesting that a *commitment to increasing the numbers of women, minority faculty and students* contributes towards transforming a campus into one with a high multicultural emphasis. Granted, while most colleges have been engaged to some degree in this activity over the past quarter of a century, few would agree that it has become a "true" or implicit objective of most institutions' missions and goals. The difference being just *recruiting* versus *committing to increasing their representation* through institutional mission, policy, and practices. One might safely assume that institutions that have indeed adopted this commitment as part of their mission and translated it into implicit and explicit policies and practices, might perhaps be among the current campuses with a strong diversity emphasis.

The other component of the definition also includes a commitment towards *creating a diverse multicultural environment and an appreciation for multiculturalism.* While this might at first appear a bit more complex and challenging to operationalize, Astin (1993b) again suggests that, generally, transforming a university to reflect a higher diversity emphasis is usually under its direct control since it can decide to implement policies and practices that commit it to increasing the representation of women, students and faculty of color, and creating a diverse multicultural environment through its course content, teaching pedagogy, and other practices.

Environmental Measures Not Related to Diversity

Finally, a brief note on other environmental measures that, while perhaps not directly related to issues of diversity, nevertheless demonstrated very strong effects for students in this study.

The results of this study provide strong support for the benefit to students of *living on campus* versus *living at home*. Living on campus had a significantly positive effect on every groups' overall satisfaction with college. Almost the opposite was true for students choosing to live at home. Every group was affected negatively by living at home, with an especially significant negative effect on African American and White students. This finding provides further support of the beneficial value of residing on campus, especially during the first year. The fact that the positive effect was so strong (Beta=.18 at $p<.01$) for African American students suggests that

university residential life units might consider enhancing their outreach to these students, especially during their first year at college. Institutions might also consider increasing their financial support to those students who are in most financial need in order to afford residing on campus versus having to live at home and commute to school.

Two individual involvement measures in this study had a relatively strong effect on students: *participating in campus protests/demonstrations* and *performing weekly hours of volunteer work*. Every student group reported a high level of college satisfaction after participating in campus protests/demonstrations. In fact, the effect of this variable was significant for every group except Chicano students. While university administrators may perhaps not be overly excited about encouraging students to participate in protests--even if it might mean graduating with a higher level of satisfaction--at a minimum, institutions may wish to consider creating or enhancing formal programs for students to develop and apply their critical thinking, presentation, and expression skills.

Similarly, *performing weekly hours of volunteer work* had a positive effect on most group's overall satisfaction, except Asian American students. African American and White students seemed to be most positively affected after performing volunteer work. This finding supports the value of many of the community and service volunteer programs that already exist on many college campuses around the country. Moreover, the value of this effect might also be considered a "diversity" activity since the volunteer service programs presumably bring a cross section of students together working towards a common objective. Indeed, it would appear that the value of this activity might have a number of benefits.

Net Effects of Diversity

In summary, this study's major findings comparing the effects of emphasizing multiculturalism and diversity issues on differentiated groups of students, suggest that there is generally a net positive effect on their overall satisfaction with college. With two exceptions, every student group benefited almost equally from each diversity environmental experience. The

results of this study appear to support much of the previous research suggesting that emphasizing multiculturalism on college campuses leads to generally positive outcomes.

The major implications of this study would appear to suggest that colleges and universities can indeed enhance the educational experiences of students by creating an environment that facilitates and fosters an understanding of and appreciation for diversity and multiculturalism. The creation of this environment appears to also require an experiential component for students in order to become involved in a range of multicultural activities. As Astin (1993b) asserts, campuses have the autonomy and capacity to develop an institutional diversity emphasis through policies and practices that support these educational outcomes.

Limitations and Suggestions for Future Research

This study in no way attempted to replicate the original study conducted by Astin (1993a) that included an assessment of the effects of emphasizing diversity on several student outcomes. In fact, one limitation of this study was the single outcome measure selected to measure the effects of a diversity emphasis. A better understanding of a greater range of effects can be measured using multiple student outcomes. This study simply attempted to measure the effects of Astin's (1993a) diversity variables on differentiated groups of students.

This study will require replication for several reasons. For example, the effects noted for Chicanos must be considered carefully given their relatively small sample size of 220 students. As noted earlier, some of the erratic effects observed for this group may be due to the sample size.

After replicating this study, the question addressing the effects of multiculturalism on differentiated groups of students can be extended using a qualitative methodology. This should provide a fuller definition, understanding, and operationalization of some of the measures used in this study. For example, two foundational measures of this study, race and multiculturalism, were operationalized with the constraints imposed through survey research and regression analysis, the selected analytical methodology. Even though all students completing the survey were requested to mark "all that apply" when asked to identify their racial/ethnic identity, in order to run the regression analyses in this study, their ethnicity/race had to be recoded into only one specific

group. This eliminated any understanding of how the large numbers of multiracial or multiethnic students might be affected. It also prohibited a better understanding and operationalization of the meaning of race and ethnicity among these students, which should be the first step before ascribing any types of effects.

A qualitative approach might also provide a different conceptualization of "multiculturalism" and "diversity" that is not limited by the definitions developed by the researchers, but emerges from the subjects. For example, even though the "diversity" constructs developed by Astin (1993a) and used in this study provided a good understanding of institutional environmental variables that contribute to a general "multicultural" environment, we are not really certain to what extent the survey respondents understood the researcher's intended meaning for "diversity" as well as other variables. For example, recall the finding that demonstrated a negative effect on college satisfaction among African American students who socialized with someone of a different race. We are not certain why this would be the only ethnic/racial group negatively affected by this measure. We might perhaps have a better clue if we could inquire about the nature of the interaction between African American students and the other groups. What did they do when they were "socializing?" What did they talk about? What happened that lead them to be negatively affected by this measure? The next step in this analysis must include a qualitative methodological approach in order to begin to explore some of the reasons for these effects.

Nevertheless, this study may perhaps help inform the ongoing public debate about the effects of emphasizing multiculturalism on college campuses. At a minimum, it reinforces the call to improve our understanding of and appreciation for diversity on college campuses, and create opportunities for students to become more involved in multicultural activities.

References

Aguirre, A. & Martinez, R. (1993). *Chicanos in Higher Education: Issues and Dilemmas for the 21st Century.* ASHE/ERIC Higher Education Report No. 3. Washington, D.C.: George Washington University School of Education and Human Development.

Astin, A.W. (1991). *Assessment for Excellence.* New York: Macmillan Publishing Co.

Astin, A.W. (1993a). *What Matters in College? Four Critical Years Revisited.* San Francisco: Jossey-Bass.

Astin, A.W. (1993b). Diversity and Multiculturalism on the Campus: How Are Students Affected? Change, March/April, V25, No. 2.

Carter, D.J. & Wilson, R.J. (1993). *Minorities in Higher Education*: Eleventh Annual Status Report. American Council on Education.

D'Souza, D. (1991). *Illiberal education: The politics of race and sex on campus.* NY: Free Press.

Finkelstein, M. (1984). *The American Academic Profession: A Synthesis of Social Scientific Inquiry Since World War II.* Columbus: The Ohio State Press.

Garza, H. (1993). Second-Class Academics: Chicano/Latino Faculty in U.S. Universities. In J. Gainen and R. Boice (Eds.), *Building a Diverse Faculty,* New Directions for Teaching and Learning. No. 53, Spring 1993, 33-41. San Francisco: Jossey-Bass, Inc.

Higher Education Research Institute (HERI), (1990). *1989-90 HERI Faculty Survey.* Los Angeles: UCLA.

Hunt, J., Bell, L., Wei, W., & Ingle, G. (1992). Monoculturalism to Multiculturalism: Lessons from Three Public Universities. In Adams, M. (Ed.), *Promoting Diversity in College Classrooms: Innovative Responses for the Curriculum, Faculty, and Institutions*, New Directions for Teaching and Learning, No. 52, Win 1992. San Francisco: Jossey-Bass Inc.

Hurtado, S. (1990). *Campus racial climates and educational outcomes.* Unpublished doctoral dissertation, University of California, Los Angeles.

Hurtado, S. (1994). The institutional climate for talented Latino students. *Research in Higher Education, 35,* 21-41.

Johnsrud, L.K. (1993). Women and Minority Faculty Experiences: Defining and Responding to Diverse Realities. In J. Gainen and R. Boice (Eds.), *Building a Diverse Faculty,* New Directions for Teaching and Learning. No. 53, Spring 1993, 33-41. San Francisco: Jossey-Bass, Inc.

LaBare, M., and Lang, S. (1992). Institutional Transformation for Multicultural Education: Bloomfield College and St. Norbert College. In Adams, M. (Ed.), *Promoting Diversity in College Classrooms: Innovative Responses for the Curriculum, Faculty, and Institutions*, New Directions for Teaching and Learning, Number 52, Winter 1992. San Francisco: Jossey-Bass Inc.

Marcus, L. (1994). Diversity and its discontents. *The Review of Higher Education, 17*, 225-240.

Milem, J. (1992). *The impact of college on white students' commitment to the goal of helping to promote racial understanding*. Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Minneapolis, Minnesota.

Orfield, G. (1993). Federal policy and college opportunity: Refurbishing a rusted dream. Change, March/April, V25, No. 2.

Orlans, H. (1992). Affirmative action in higher education. *Annals of the American Academy of Political and Social Science, 523*, Sept., 144-158.

Pascarella, E.T., & Terenzini, P.T. (1991). *How College Affects Students*. San Francisco: Jossey-Bass.

Schlesinger, A.M. (1992). *The Disuniting of America: Reflections on a Multicultural Society*. New York: W.W. Norton & Co.

Smith, D. (1990). The Challenge of Diversity: Implications for Institutional Research. In Nettles, M. (Ed.). *The Effect of Assessment on Minority Student Participation*, New Directions for Institutional Research, Number 65, Spring 1990. San Francisco: Jossey-Bass, Inc.

Summary Reports: Doctorate Recipients from U.S. Universities, 1990, 1991, 1992. Survey of Earned Doctorates, National Research Council.

Tierney, W. (1989). Cultural politics and the curriculum in postsecondary education. *Journal of Education*, V171, 72-88.

Tierney, W. (1993). *Building communities of difference: Higher education in the twenty-first century*. Connecticut: Bergin & Garvey Greenwood Publishing Group.

Zemsky, R. (1989). The Goal of Diversity: Access and Choice in Academia. In Finifter, D., Baldwin, R., & Thelin, J (Eds.), *The Uneasy Public Policy Triangle in Higher Education*. New York: American Council on Education, Macmillan Publishing Co.

Appendix

The following 81 variables were used in this study--the asterisk next to a variable name indicates that the variable affected the study's outcome by entering into one or more regression equations.

Input (Control) Variables:

*AVERAGE HIGH SCHOOL GRADES
*SAT COMPOSITE SCORES
*STUDENT'S SEX-F
*HIGHEST DEGREE PLANNED ANYWHERE
AGE OF STUDENT ON 12/31/85
ENROLLMENT STATUS

Bridge:
*AID SOURCE: PARENTS OR FAMILY
AID SOURCE: SPOUSE
AID SOURCE: SAVINGS FROM SUMMER WORK
AID SOURCE: OTHER SAVINGS
*AID SOURCE: FULL-TIME JOB
*AID SOURCE: PART-TIME JOB
AID SOURCE: PELL GRANT
AID SOURCE: SEOG
AID SOURCE: STATE SCHOLARSHIP-GRANT
AID SOURCE: WORK-STUDY GRANT
AID SOURCE: OTHER COLLEGE GRANT
AID SOURCE: CORP TUITION ASSISTANCE
*AID SOURCE: OTHER PRIVATE GRANT
AID SOURCE: STUDENT'S GI BENEFITS
AID SOURCE: PARENT'S GI BENEFITS
AID SOURCE: OTHER GOVERNMENT AID
AID SOURCE: FGSL
AID SOURCE: NDSL
AID SOURCE: OTHER COLLEGE LOAN
AID SOURCE: OTHER LOAN
AID SOURCE: OTHER
FRESHMAN MAJOR GROUP: AGRICULTURE
FRESHMAN MAJOR GROUP: BIOLOGICAL SCIENCE
FRESHMAN MAJOR GROUP: BUSINESS
FRESHMAN MAJOR GROUP: EDUCATION
FRESHMAN MAJOR GROUP: ENGINEERING
FRESHMAN MAJOR GROUP: ENGLISH
*FRESHMAN MAJOR GROUP: HEALTH PROFESSION
FRESHMAN MAJOR GROUP: HISTORY/POLI SCI
FRESHMAN MAJOR GROUP: HUMANITIES
FRESHMAN MAJOR GROUP: FINE ARTS
FRESHMAN MAJOR GROUP: MATH OR STATISTICS
FRESHMAN MAJOR GROUP: PHYSICAL SCIENCE
FRESHMAN MAJOR GROUP: SOCIAL SCIENCE

FRESHMAN MAJOR GROUP: OTHER TECHNICAL
FRESHMAN MAJOR GROUP: OTHER NON-TECH
*FRESHMAN MAJOR GROUP: UNDECIDED
*PLAN TO LIVE: HOME, ON CAMPUS, or PRIVATE ROOM

Environmental (Independent) Variables

Institutional Characteristics

*INSTIT CONTROL/TYPE= * "PUBUNIV", * "PUB4YR", "PRIVUNIV", "PRIV4YR"
INSTITUTIONAL RACE
SIZE: TOTAL ENROLLMENT
*INSTITUTIONAL SEX= * "COED", "MALE", "FEMALE"

Faculty Environment

*FAC PER: DIVERSITY EMPHASIS
*FAC PER: DIVERSITY ORIENTATION
*FAC PER: STUDENT ORIENTATION
RESEARCH ORIENTATION

Curricular Measure

MINORITY/3RD WORLD COURSE REQUIR

Peer Environment

RACIAL COMPOSITION:
% WHITE UGFTE
%BLACK UFGTE
%AMERICAN INDIAN UGFTE
*% ASIAN UGFTE
SELECTIVITY/ACADEMIC ABILITY:
*INSTITUTIONAL SELECTIVITY (SATV+M)

PEER "PERSONALITY" FACTORS:
*PEER MEAN: INTELLECTUAL SELF ESTEEM
*PEER MEAN: PERMISSIVENESS
*PEER MEAN: SOCIAL ACTIVISM
*PEER MEAN: ARTISTIC INCLINATION
* PEER MEAN: OUTSIDE WORK
* PEER MEAN: SCIENTIFIC ORIENTATION
* PEER MEAN: FEMINISM

Intermediate Outcome

Individual Involvement Measures

*VOLUNTEER WORK:PARTICIPATED IN VOL ACT
*ATTD RACIAL/CULTURAL AWARENESS WKSHP
*PARTICIPATED IN CAMPUS PROTESTS/DEMONST
ENROLLED IN ETHNIC STUDIES COURSE
ENROLLED IN WOMEN'S STUDIES COURSE